PRODUCT CHARACTERISTIC DETERMINANTS OF SOUTH AFRICAN SHOWROOMERS' BEHAVIOUR: A BRICK-AND-CLICK VALUE PERSPECTIVE

Mariette Frazer
University of Johannesburg, Department of Marketing Management
mfrazer@uj.ac.za

Ilse Struweg
University of Johannesburg, Department of Marketing Management
istruweg@uj.ac.za

Authors' biographies:

Mariette Frazer[1]: Ms Frazer is a lecturer and the Academic Coordinator: Online & Continuing Education Programmes (CEPs) and the Programme Coordinator for the Advanced Diploma Retailing. She is based on the Bunting Road campus, she specialises in Retailing and Sales Management and holds a MCom (Marketing Management) from the University of Johannesburg. In addition, she is also the Chairperson for the W&R Seta's HET QMB forum, which focuses on the quality of the skills development of the Retail industry in South Africa.

Ilse Struweg: Prof Ilse Struweg is an Associate Professor in the Department of Marketing Management, lecturing Consumer Behaviour and Integrated Marketing Communication on the BCom programme, Strategic Brand Management to BCom (Hons) Marketing Management students and is involved in the supervision of post-graduate students. Prof Struweg has worked in higher education, both in academia and university management, locally and internationally since 2001. She holds a PhD from the University of Pretoria in Communication Management. Her teaching philosophy is based on developing and challenging students (beyond knowledge and skills) to become impactful, mindful citizens.

[1] Corresponding Author

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Abstract

Showrooming as consumer behaviour phenomenon in multichannel retailing has grown in importance in South Africa. In showrooming, consumers visit an offline retail store ("brick") for product information gathering purposes and consequently purchase online ("click") at a competing retailer. This study draws on Daunt and Harris' (2017) research, employing a value-based service-dominant theoretical lens. Showrooming is conceptualised as a two-stage process of in-store value taking and online value co-creation/co-destruction. Utilising survey data from 225 South African showroomers, SPSS is employed to assess a research model, consisting of 4 hypotheses. The paper's findings reveal that Daunt and Harris' (2017) developed market findings are mostly aligned with the product characteristic determinants of emerging market consumers' showrooming. However, the product speed of technological change, is not substantiated in an emerging market such. The study's value lies in it being the first empirical investigation of consumer showrooming behaviour in an emerging market, through a service-dominant logic lens. It appears to be the first empirical measurement of Daunt and Harris' (2017) model of consumer showrooming, focusing on product characteristics as antecedents of showrooming behaviour. Lastly, it contributes to theoretical and managerial inquiry of in-store value taking and online value co-creation/co-destruction behaviour in an emerging market.

Keywords: Showrooming behaviour, Multichannel retailing, Online value co-creation/co-destruction, In-store value taking behaviour, Emerging market.

1. Introduction and background

The South African retail experience has been revolutionised by the proliferation of the Internet, smartphones, hand-held digital devices and social media. More importantly, the *integration* of these channels in both "brick" (brick-and-mortar stores or offline) and "click" (online) marketing, has led to a transformation in the retail behaviours of the past. Consumers are therefore, exposed to multiple channels before ultimately making a purchase. From a retailer perspective, the instrumental inception of the Internet as a retail channel has similarly created opportunities for multichannel retailing (Basak, Basu, Avittathur & Sikdar, 2017). Zhang, Farris, Irvin, Kushwaha, Steenburght and Witz (2010:168) define multichannel retailing as the collection of activities when selling products or services to consumers through more than one channel. Essentially, it therefore entails the practice of selling similar products, using multiple channels, through diverse platforms with the intention to engage consumers towards a purchase.

In a multichannel retailing environment, considering a brick-*versus*-click perspective is obsolete, with the future retail reality of brick-*and*-click; especially in emerging markets like South Africa (Nielsen, 2017). In July 2018, De Matos Silva (2018) described the South African digital landscape to have 28.5 million Internet users, equating to 52% of the South African population being online users, of which 74% are using mobile phones. Urgerer (2019) however argues that South African consumers still rely on in-store purchases for their shopping experiences, partly attributing it to the challenges around accessibility of mobile solutions as a result of exceptionally expensive data. Still, Statista (2019) reports the South African eCommerce revenue market amounts to US$3,308 million, expecting an annual growth rate of 9.9% (2019-2023). This will result in a market volume of US$4,817 million by 2023. It should therefore be acknowledged that South Africa is not as advanced as first world markets in this regard, but that these statistics provide evidence of a trajectory of South Africa rising its digital landscape into prevalence.

Against this backdrop of increased online sales in South Africa, the actual consumer behaviour in multichannel retailing remains complex, as the brick-and-click channels continue to blur. One such consumer behaviour development is consumer showrooming (Gensler, Scott, Neslin & Verhoef, 2017). Daunt and Harris (2017:166) view showrooming as a form of multichannel shopping and predicate that it entails differing degrees of value taking and value co-creation/co-destruction behaviours across brick-and-click channels in the consumer

purchasing process. For the purpose of this paper, showrooming is defined as "the activity of consumers viewing and gathering information, and at times, trying products at brick-and-mortar retail stores, but making the actual purchase online from a brick-and-mortar retailer often at a lower price." (Burns, Gupta & Hutchins, 2019:101). One of the results of showrooming is that traditional brick-and-mortar stores provide product information to the consumer, while the product sale happens online (via clicking behaviour), resulting in no revenue earnings for the traditional store, despite the resources and efforts put in to showcase the product (Basak et al., 2017). As such, brick-and-click consumer behaviour assists consumers to capitalize on the benefits of shopping from both brick-and-click channels (Arora & Sahney, 2018). Daunt and Harris (2017) refer to this change in consumer channel behaviour as a "shift in the rules of exchange", resulting in showrooming being regarded as a form of value co-destruction (Zhang, Lu, Torres & Chen, 2018; Surachartkumtonkun, McColl-Kennedy & Patterson, 2015; Plé & Chumpitaz Cáceres, 2010).

This paper forms part of a larger study which responds to the need for research in value co-creation/value co-destruction behaviour, specifically from a showroomer perspective (Neslin & Shankar, 2009; Ostrom, Parasuraman, Bowen, Patricio & Voss, 2015; Verhoef, Neslin & Vroomen, 2007). Correspondingly, the broader study attempts to address Robertson, Polensky and McQuilken's (2014) call for the necessity of such an examination as a result of the growth in online shopping and interactive media in a technology-enabled environment. This study draws on the service-dominant logic paradigm – suggestive of Taylor and Hunter (2015) and Quach and Thaichon (2017) – to explore value taking and value co-creation/co-destruction behaviour of South African showroomers using Daunt and Harris' (2017) conceptual research model. This research model conceptualises product, consumer and channel characteristics as antecedents of a distinctly two-phased (in-store value taking and online value co-creation/destruction) view of consumer showrooming.

The scope of the current paper, however, focuses specifically on product characteristics as antecedents of the two phases of consumer showrooming in South Africa, namely in-store value taking and online value co-creation/co-destruction. It is against this backdrop that the following research objective guides this paper:

To explore and describe the product characteristics as antecedents of in-store value taking and online value co-creation/co-destruction by South African showroomers.

Consequently, this study's contribution is threefold. First, this paper represents the first empirical investigation of consumer showrooming behaviour in an emerging market, namely South Africa, through the lens of the service-dominant logic. Secondly, this study appears to be the first application of the Daunt and Harris (2017) model of measuring consumer showrooming, by focusing on the product characteristics, as antecedents of consumer showrooming in an emerging market context. Thirdly, the study adds uniquely to the theoretical and managerial understanding of in-store value taking and online value co-creation/co-destruction behaviour in an emerging market.

The paper starts with a literature review, consisting of a brief discussion of consumer showrooming, followed by the theoretical lens (service-dominant logic) grounding the study, as well as value-taking and value co-destruction/co-creation behaviour of showroomers. Subsequently, the proposed research model based on the work of Daunt and Harris (2017) is discussed to guide the hypotheses of this paper. In the methodology section, the methodological choices of the study are presented. The results and discussion are followed by conclusions and recommendations, as well as suggestions for further research.

2. Consumer Showrooming

The "always on" customers (Fernández, Pérez & Vázquez-Casielles, 2018:300) in the multi-channel retail environment use different mixes and sequences of channels in their shopping behaviour. Rapp, Baker, Bachrach, Ogilvie and Beitelspacher (2015) view showrooming as a relatively new phenomena and describe it as the consumer behaviour of visiting a brick-and-mortar store, with the intension to purchase online. In contrast, Arora and Sahney (2018) see showrooming as not new in its entirety, but rather that some parallels can be drawn between showrooming and a number of existing customer behaviour concepts, such as cross-channel free-riding behaviour (Van Baal & Dach, 2005), research shopping (Verhoef et al., 2007), and hybrid shopping behaviour (Kalyanam & Tsay, 2013). This parallelism lies in customers using different channels in a single purchase process.

The benefits of using different channels in a single purchase process – in the case of showrooming first brick, and then click behaviour – are based on the perceived gain in quality, price competition, in-store assistance and the anticipated regret that motivate customers to showroom (Arora & Sahney, 2018). In contrast to the benefits of showrooming, scholars have also studied the negative impact of showrooming. Studies in this regard include the negative effect of showrooming on the profitability of offline retailers (Balakrishnan, Sundaresan & Zhang, 2014; Mehra, Kumar & Raju, 2014); and Rapp et al.'s (2015) study on the effect of showrooming on the self-efficacy and performance of in-store salespeople. As a result, many retailers have developed tactics to combat showrooming by specialising their offerings and making comparative shopping difficult (Zimmerman, 2012).

Central to the study of consumer showrooming is the purposeful benefit-seeking behaviour from information and services of one retailer in one channel, before purchasing from a different retailer in a different channel. Showroomers therefore knowingly take value from channel members but does not reciprocate with the original channel from which value was purposefully taken. It is against this background, that the service dominant logic provides a fitting means with which to consider the showrooming phenomenon.

3. Showrooming through a service-dominant logic theoretical lens

The highly prominent service dominant logic (S-D logic) of Vargo and Lusch (2008; 2009; 2014) has facilitated a "gestalt shift" (Wright & Russell, 2012:218) in marketing thought. This change in marketing, is greater than the long-established divide between goods and services and, at its core, instead, postulate that service is the engrained source of any exchange (Vargo & Lusch, 2014). Wright and Russell (2012:218) similarly argue that goods are not products for sale but are "physical instantiations of bundles of service". In retailing, the example of purchasing a smart phone could clarify this idea of "bundles of service" in the service eco-system approach; Buying a smart phone from a retailer is not only about the once-off transaction of property transfer from the retailer to the customer, but more so about a) a complex collection of relations influenced by several actors, b) technologies and c) resources.

A service ecosystem thus do not only involve general actors, but rather, according to Lusch and Spohrer (2012) also includes tangible and intangible components, which, Åkesson, Edvardsson and Tronvoll (2014) maintain to possibly be both enablers and inhibiters in the co-creation of value. Vargo and Lusch (2017:47) describe the source of value and the purpose of exchange in their original service-dominant thinking, as the activities derived from focused experiences and knowledge gained for the self and others, but also reciprocal experiences and knowledge from others for the self. Therefore, value is not created and later delivered by one actor in the service ecosystem, but in direct contrast, created through a process of value co-creation by multiple actors and tangible/intangible components. Karpen, Bove, Lukas and Zyphur (2015) summarize the S-D logic, as a service-based view of marketing, considering service as the underlying reason for exchanges, primarily enabled by operant resources such as knowledge and capabilities and actualized through the value co-creation process.

This relatively new logic is therefore based on the "value-in-use" concept, where exchange involves the exchange of capabilities of the human in the exchange process; where goods or products are simply the means of interactions (Shamim & Ghazali, 2014). These exchanges are central to a retailer's relationships with its customers and stakeholders, whereby each actor trades something of value with the potential of becoming at an advantage as a result (Hult, Mena, Ferrell & Ferrell, 2011).

During the early years of the new millennium, Prahalad and Ramaswamy (2002, 2004) argued that, in retail, the customer is more than a mere co-producer of the core product or service offering that enables the delivery of experience, but rather a co-creator of experience or value. This resembles the key argument of S-D logic that "value-in-use" is constructed by a "collaborative process of co-creation between parties" (Vargo & Lusch, 2008:256). Implicit here, is the notion that the parties' interactions have an inherent propensity to beget value co-creation. Plé and Chumpitaz Cáceres (2010) provide a turning argument in this seemingly "sanguine" outcome of value-related processes in S-D logic, by suggesting the pragmatic alternative of value co-destruction.

4. Showrooming behaviour: In-store value taking and online value co-creation/co-destruction

Multi-channel retailing therefore increases the complexity of viewing value, both from a retailer and from a customer perspective. Customers benefit from showrooming through their search activities across the multiple channels, in other words, the "value-in-use" concept of S-D logic. Likewise, retailers from which the final purchase transpire, gain from the co-creation between themselves and the purchasing customer, strengthened by the value that the customer has accumulated from the competing, showroomed retailer. This therefore leads to showrooming epitomising a parallel form of in-store value taking and online value de-construction/co-creation. Daunt and Harris (2017:168) define in-store value taking as the "degree to which customers intentionally utilize multiple in-store personnel and other firm-provided resources, and thus co-destruct value in-store, to research a desired product without intending to purchase from that provider". Value co-destruction, for the purpose of this study, is based on Plé and Chumpitaz Cáceres' (2010:431) definition where value co-destruction, regarded as an interaction process between service systems (in the case of this study the showrooming) results in damaging at least one of the system's interests (in this case the brick-and-mortar store). More specifically, the degree to which customers use multiple retailer-provided resources for research purposes of the desired product in-store, not purchasing from that retailer (co-destruction), and then making the purchase from another on-line store (value co-creation).

5. Antecedents of showrooming behaviour

In studying "channel multiplicity" (Van Bruggen, Jap, Reinartz & Pallas, 2010:331), and more specifically showrooming, or reverse ROPO – Research offline, purchase online (Kowalczuk, 2018) – authors such as Verhoef et al. (2007) argue that theoretical inquiry into the antecedents of showrooming is lacking. Since then, some authors have studied several possible antecedents which are presented in Table 1 below.

Table 1: Summarised literature on antecedents to consumers' showrooming behaviour

Author(s) and year	Major findings
Sit, Hoang and Inversini (2018)	Identified eleven positive and negative *emotions* participants experienced during the showrooming process that affected showrooming behaviour.
Gensler et al. (2017)	Pricing is not the only determinant of showrooming. It is the *perceived gain in quality, in-store sales services assistance* and showroomers' *anticipated regrets* that motives showrooming behaviour.
Rejón-Guardia and Luna-Nevarez (2107)	Distinguished the *need for touch and a price difference online* as drivers of showrooming behaviour.
Daunt and Harris (2017)	Showrooming is a value creation process based on *product characteristics, consumer characters and channel characteristics* as antecedents of consumer showrooming.
Arora, Singha and Sahney (2017)	Claim that the perceived search benefits offline and perceived purchase benefits online *collectively* leads to showrooming.

Table 1 above offers insight into the incongruent study of the antecedents of showrooming behaviour up to date. Therefore, the presented research model in the next section addresses the product characteristic determinants for showrooming behaviour in South Africa.

6. Research model

The proposed conceptual model is grounded in previous research on the antecedents of customer showrooming (Daunt & Harris, 2017). Showrooming is theorised, for the purpose of this paper, as two phases, namely in-store value taking and online value co-creation/co-destruction, as customers engage in differing degrees of value behaviours in both in-store and via online channels. As indicated in the introduction of this paper, the focus is only on the product characteristics as antecedents of showrooming, and not on the customer and channel characteristics also presented in Daunt and Harris' (2017) conceptual model. The research model for the purpose of this paper, therefore, hypothesise three product characteristics as predictors of showrooming behaviour. These are labelled as 1) Technological speed of change, 2) Product acquisition value and 3) Product availability.

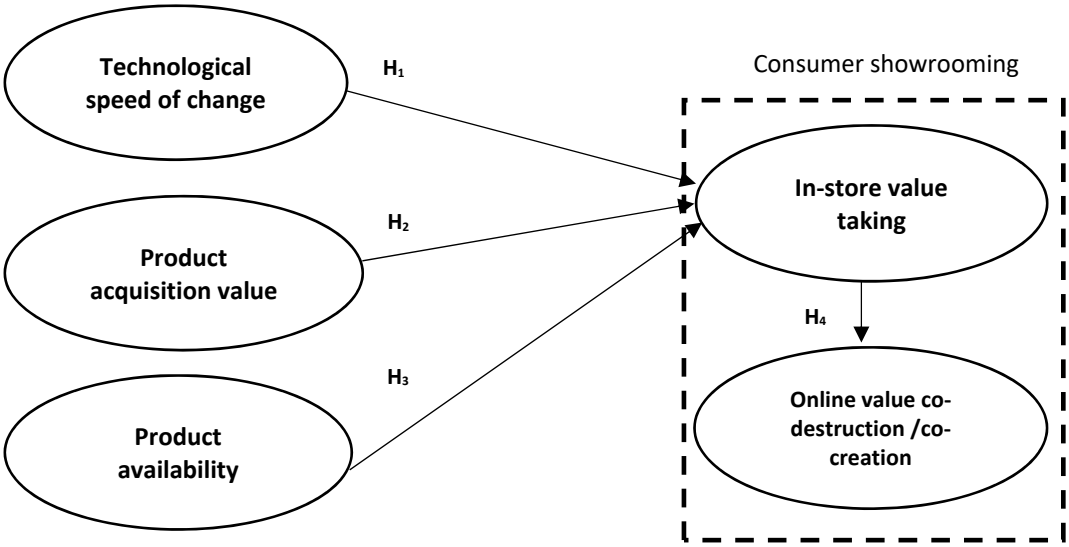

Figure 1: Product characteristics antecedents and consumer showrooming conceptual model.

6.1 Technological speed of change

Daunt and Harris (2017) use the description of Jaworski and Kohli (1993) to refer to the technological speed of change as the degree of instability and adjustments in the product market. In the context of this study, technological speed of change related to products is also explained as products that are regularly modified and speedily released. The focus here is thus on regular innovations to meet customer needs. Van Baal and Dach (2005) suggest that products that are recurrently modified with new releases and modernized, are most likely involving extensive research activities. In this regard, Daunt and Harris (2017) argue that when the technological speed of change of a product is high, customers will engage extensively in store to reduce the perceived risk of such a 'new' product. Therefore;

H_1 The product's speed of technological change positively and significantly influences the South African consumers' in-store value taking.

6.2 Product acquisition value

Bhatt, Swaminathan and Suri (2017) explain product acquisition value as the gain (or loss) arising out of purchasing a product. Correspondingly, Grewal, Munger, Iyer and Levy (2003) argue that product acquisition value implies the symbolic perceived importance of the product to the customer. In the customers' pursuit to acquire the best product value, they are likely to switch between different stores and channels. This further contributes mostly to in-store value taking behaviour (Daunt & Harris, 2017). Accordingly;

H_2 The perceived product acquisition value positively and significantly influences the South African consumers' in-store value taking.

6.3 Product availability

Product availability has traditionally been regarded to improve customer involvement levels and subsequently, purchase intention (Bian & Moutinho, 2011). Product availability is defined according to the effortlessness with which customers can obtain and purchase a product (Balachander & Farquhar, 1994). Carlton and Chevalier (2001) suggest that limiting product availability might be a valuable means to manage the "showrooming problem". Daunt and Harris (2017) argue however, that the existence of multiple stock outlets that carry a specific product allow customers to participate in showrooming and then cause in-store value taking behaviour. Thus;

H_3 Product availability positively and significantly influences the South African consumers' in-store value taking.

6.4 In-store value taking and online value co-creation/co-destruction

The final hypothesis of this paper describes the composition of the relationship between the two variables that make up showrooming, namely in-store value taking and then online value co-creation/co-destruction. Multi-

channel shopping and showrooming research (Chiou, Wu & Chou, 2012; Verhoef et al., 2007; Gensler et al., 2017; Arora & Sahney, 2017) suggest that the volume of search activity and advantages taken from in-store resources, relates positively to the intensity of online pre-purchase search activity. Therefore, Daunt and Harris (2017) conclude that customers take and co-create/co-destruct value from online and brick-and-mortar stores to their own maximized advantage. Therefore;

H_4 In-store value taking positively and significantly influences online co-destruction/co-creation among South African showroomers.

7. Methodology

To gain better insight on the showrooming behaviour of South African consumers, a quantitative research paradigm was used. This is based on Eriksson and Kovalainen's (2016) argument that quantitative designs are known to be used to quantify behaviours, opinions and attitudes. Approval from the University of Johannesburg ethics committee was obtained before the fieldwork commenced and the questionnaire was pre-tested on a sample of respondents. Convenience sampling was used to gather data from 225 respondents. Convenience sampling was used, based on its economic effectiveness and time advantages (Bradley, 2013:168). The target population included both males and females in South Africa who has purchased an item online in the past 6 months. A survey-based design was used based on the research model comprising hypothesis. A suitable sample of 225 respondents was recruited, comparable to the Daunt and Harris (2017:170) study who recruited 275 respondents.

The Daunt and Harris (2017:173-174) questionnaire was adopted for replication purposes in the South African emerging market context. The questionnaire commenced with a preamble, explaining the purpose of the study and ensuring the anonymity of participants. A screening question was included in the preamble of the questionnaire to obtain demographic information of the participants and to ensure that the participants have purchased an item from an online retailer within the past 6 months. The constructs for the study were tested on a seven-point Likert scale as per the Daunt and Harris (2017) study. The next section covered questions on the showrooming habits of the participants indicating their level of agreement or disagreement to statements on the following topics: In-store value taking, online co-creation/co-destruction, technological speed of change, perceived acquisition value, product availability, trust in in-store sales employees, perceived value of online shopping, trust in online stores, product involvement, internet savviness, shopping enjoyment and in-store shopping savviness. Section B consisted of 71 statements to measure the 13 constructs above. As mentioned in the introduction of this paper, this paper forms part of a larger study and therefore the questionnaire included additional items. This paper focuses on the product characteristics as antecedence to consumer showrooming behaviour. The variables for the purpose of this paper therefore included: In-store value taking, online co-creation/co-destruction, technological speed of change, perceived acquisition value and product availability.

8. Results and findings

The quantitative data was analysed using IBM SPSS 24.0. The internal consistency reliability of the scales to assess the hypotheses was evaluated by Cronbach's alpha coefficients for the scales. The validity of the scale was tested in the original study by Daunt and Harris (2017) and validity of the scales in a South African context was confirmed using a pilot study among the targeted respondents. Statistical techniques like frequencies, descriptive statistics and inferential statistics were also calculated. For this research to be effective, a confidence interval and significance level are used when testing hypothesis, with a 95% confidence interval and a 5% significance level. This section provides results on the demographic profile of the respondents, their showrooming behaviour as well as product characteristics as predictor of showrooming behaviour among South African consumers.

8.1 Reliability statistics

In order to increase the reliability of the scales during the statistical analysis, four items were removed, namely item 3 of technical speed of change; item 2 of in-store value taking; and items 4 and 5 of online value taking. Also, item 3 on the product availability scale was reversed scored, similar to the original Daunt and Harris (2017) study.

For the purpose of this study, internal consistency were computed by using Cronbach's alpha test and composite reliability test (CR). Table 2 below provides the Cronbach's alpha and composite reliability scores for the five constructs which received a measure larger than 0.7 (Spiliotopoulou, 2009:151). The third reliability test was the average variance extracted (AVE) (see Table 2). Overall, all average variance explained (AVE) were above 0.4, thus acceptable according to the literature (Fraering & Minor, 2006). Convergent validity was assessed by checking if individual item loadings for each corresponding research construct was above the recommended value of 0.5 (Aldalaigan & Buttle, 2002). Thus, based on the data in Table 2, all five constructs had loadings of more than the recommended 0.5, indicating acceptable convergent validity (Dunn, Seaker & Waller, 1994). These results provided evidence for acceptable levels of research scale reliability. This is supported by most of the inter-item correlation within the optimal range of 0.2 to 0.4 (Pallant, 2013:96). Additional two outlier cases were removed to improve the skewness of the results for regression analysis.

Table 2: Reliability

Scales	Factor loadings	N	AVE	CR	Cronbach Alpha α	Mean inter-item correlations
Technological speed of change						
There are often new versions of the product I purchased online.	0.820	225	0.516	0.653	0.759	0.441
I can't predict how this product will develop in the future.	0.759					
Products of this type change quickly.	0.780					
Products of this type change slowly.	0.490					
Product acquisition value						
I think that given this product's features, it is good value for money.	0.753	225	0.642	0.877	0.837	0.565
The product meets both my quality and price requirements.	0.804					
I value this product because it meets my needs for a reasonable price.	0.869					
This product is of considerable value to me.	0.774					
Product availability						
The product is commonly available.	0.741	225	0.472	0.779	0.709	0.391
The product is easy to find.	0.788					
Many stores sell this product.	0.585					
The product is not easy to find.	0.613					
In-store value taking						
Before buying online, I experienced the product in a number of different offline stores.	0.794	225	0.461	0.805	0.806	0.456
I used offline stores to research all of the information that I needed about the product, before buying it online.	0.770					
I compared the price of the product at a number of different offline stores before buying it online.	0.715					
I went to lots of different offline stores to find out about the product before buying it online.	0.613					
Before buying online, I only visited one offline store.	0.575					
Online value taking						
After looking in offline stores, I checked out the product on several online websites before I bought it.	0.770	225	0.456	0.767	0.737	0.415
After looking in offline stores, I searched for more product information from different online stores before buying the product.	0.754					
After comparing the price of the product at different offline stores, I compared the price at a number of offline stores before I bought it.	0.604					
After looking in offline stores, I bought the product from one of the first websites that I visited.	0.548					

Campbell and Fiske's multi-trait multi-method matrix assesses the construct validity of a set of measures in a study (Shen, 2017). This approach stresses the importance of using both discriminant and convergent validity. Having discussed convergent validity above and in Table 2, this section deals with discriminant validity,

illustrated in Table 3 below. One of the methods to test discriminant validity of research constructs is the evaluation of whether the correlations among latent constructs are less than 1.0 (Nunnaly, 1978). The component correlation matrix depicted in Table 3 below shows the value for each construct was found to be greater than correlation values (Fornell and Larcker, 1981). As indicated in Table 3, the intercorrelation values for all paired latent variables are less than 1, indicating the existence of discriminant validity.

Table 3: Component Correlation Matrix of Showrooming behavior (discriminant validity)

Technological speed of change	**0.718**				
Product acquisition value	0.046	**0.801**			
Product availability	0.193	0.287	**0.687**		
In-store value taking	0.108	0.308	0.321	**0.679**	
Online value taking	0.438	0.220	0.362	0.482	**0.675**

8.2 Respondents' demographic information

The demographic results showed that 53% of the respondents were female and most of the respondents between the ages of 20-30 years (56%). The education level of the respondents revealed that a significant part of the respondents have completed high school (29.3%) and a post school qualification – 36% holding a Diploma and 23.1% a University Degree. Employment statistics of the respondents indicated that 52.9% holds full-time employment with an organisation.

8.3 Respondents' showrooming behaviour

The results of the participants' overall showrooming behaviour as influenced by the product characteristics is shown in Table 6 below. From the table most respondents agreed that they engaged in some form of showrooming behaviour as the mean values recorded were between 4 and 5. However, many disagreed with the statement that they purchased the product at the first website after visiting an offline store as this statement achieved a mean value of 2.92. There were no outliers in the standard deviation reported. The highest value recorded was 1.93 for the statement "This product is not easy to find".

Table 6: Descriptive statistics

Statements	**Mean n=225**	**Standard Deviation**
Technological speed of change		
There are often new versions of the product I purchased online.	4.80	1.641
I can't predict how this product will develop in the future.	4.77	1.494
Products of this type change quickly.	4.55	1.755
Products of this type change slowly.	3.36	1.695
Product acquisition value		
I think that given this product's features, it is good value for money.	5.62	1.205
The product meets both my quality and price requirements.	5.59	1.262
I value this product because it meets my needs for a reasonable price.	5.53	1.302
This product is of considerable value to me.	5.49	1.169
Product availability		
The product is commonly available.	5.13	1.642
The product is easy to find.	5.03	1.638
Many stores sell this product.	4.94	1.640
The product is not easy to find.	3.34	1.930
In-store value taking		
Before buying online, I experienced the product in a number of different offline stores.	4.75	1.816
I used offline stores to research all of the information that I needed about the product, before buying it online.	4.64	1.734
I compared the price of the product at a number of different offline stores before buying it online.	4.62	1.749

Statements	Mean n=225	Standard Deviation
I went to lots of different offline stores to find out about the product before buying it online.	4.48	1.755
Before buying online, I only visited one offline store.	3.35	1.926
Online value taking		
After looking in offline stores, I checked out the product on several online websites before I bought it.	4.99	1.614
After looking in offline stores, I searched for more product information from different online stores before buying the product.	4.91	1.629
After comparing the price of the product at different offline stores, I compared the price at a number of offline stores before I bought it.	4.84	1.724
After looking in offline stores, I bought the product from one of the first websites that I visited.	2.92	1.652

8.4 Hypotheses testing

To investigate the product characteristic as antecedents of in-store value taking and online value co-creation/co-destruction by South African showroomers, the product characteristics; technological speed of change, perceived acquisition value and product availability were considered independent variables while in-store value taking and online value co-creation/co-destruction were treated as dependent variables. Preliminary analysis was conducted to ensure that the assumptions of normality, linearity, multicollinearity and homoscedasticity were within acceptable parameters. The residual analysis of in-store value taking and online co-destruction/co-creation were not ideal, however the results links with theory and the results from the original study by Daunt and Harris (2017) as most respondents agreed that they visits store to gather information before purchasing online. The Pearson correlation coefficient indicated a moderate relationship for perceived acquisition value (0.308) and product availability (0.321) however, technological speed of change (0.108) reported a weak correlation. The total variance explained by the model for product characteristics was 16%, instore value taking was 25% and $F(3, 221) = 13.621$, $p < 0.005$. The testing of the hypotheses reveals the following:

H_1 theorised that the speed of the product's technological change positively and significantly influences the South African consumers' in-store value taking and is rejected (std. B =0.067; p= 0.423).

H_2 suggested the product acquisition value positively and significantly influences the South African consumers' in-store value taking and is accepted (std. B = 0.311; p = 0.000).

H_3 indicated that product availability positively and significantly influences the South African consumers' in-store value taking and is accepted (std. B = 0.260; p = 0.000).

H_4 argued that in-store value taking positively and significantly influences the South African consumers' online co-destruction/co-creation and is accepted (std. B = 0.485; p = 0.000).

9. Discussion

This paper aimed to explore the product characteristics as antecedents to showrooming behaviour among South African showroomers. This study contributes empirically through the application of the Daunt and Harris (2017) model in an emerging market context and the investigation of showrooming behaviour focussing on product characteristics as antecedents to in-store value taking and online co-destruction/co-creation. Existing literature and research on consumer showrooming, service-dominant logic as well as in-store value-taking and online value co-creation/co-destruction, within the retail context were explored and synthesised to lead to four hypotheses of this paper.

The testing of the model in the South African emerging market context reveals that the product characteristic of speed of technological change as a strong driver of showrooming behaviour is not supported. This is in direct contrast to evidence of technological speed of change in showrooming of the developed market context of the Daunt and Harris (2017) study but is also supported by Van Baal and Dach's (2005) German study and Kucuk and Maddux's (2010) US study. However, the product acquisition value and product availability strongly predict

showrooming behaviour among an emerging market, such as South African consumers. This aligns with the original findings by the Daunt and Harris (2017) study. It is therefore argued that this study supports that product characteristic as antecedents to showrooming behaviour, with the exception of speed of technological change, are a strong drivers of showrooming. The confirmation of hypotheses H_2 and H_3 underscore the type of products for which showrooming is most common. Contrary to the findings of Daunt and Harris (2107), the findings of this study show that showrooming is greater for products that are characterised by lower levels of technological speed of change, products that are perceived of high value and monetary worth and high availability. This builds on research by Sit et al. (2018), Gensler et al. (2017), Rejón-Guardia and Luna-Nevarez (2107) and Arora et al. (2017), which have explored additional antecedents of showrooming behaviour. Furthermore, this study finds strong relationship between in-store value taking and online value co-creation/co-destruction as the Hypotheses that in-store value taking is positively associated to online value taking and co-creation is strongly supported in an emerging market context. Therefore, from an emerging market customer perspective, showrooming occurs predominantly when the cost of acquiring the product is high and the product is highly available.

The research findings demonstrate that consumer showrooming in emerging markets cannot be treated as the same phenomenon as in developed markets. The relationship of product characteristics and antecedents to showrooming behaviour seems to differ among South African consumers and speed of technological change has a week relationship with showrooming behaviour. Financial cost and product availability remain a driver to showrooming behaviour as the emerging market consumer may be more motivated by these product characteristics. Therefore, online suppliers may need to focus less on technology advantages of their offerings to consumers in an emerging market such as South Africa and rather emphasise product availability and value for money (Child, Kilroy & Naylor, 2015). This study also supports the finding of Daunt and Harris (2017), as well as Ellway and Dean (2015) that co-destruction and co-creation may occur in a simultaneous, concurrent, and iterative manner.

The findings of this South African study further support findings from Child et al. (2015) that brick-and-mortar retailers' consumers are indeed partaking in showrooming behaviours and seamless integration of online channels should be considered by retailers. Alternatively, the value-taking of showrooming may increase cost for the retailer's store options as consumers use the store services and personnel to gain information and test products to purchase the product online afterwards. Offering value to customers in store while competing on price and product assortment with an online store will continue to become more difficult as the emerging market consumer becomes more connected and internet savvy. Emerging market consumers are fast to adopt new technologies and seem to opt for cost saving which impacts their loyalty. Retail stores could exploit the available mobile technology by offering store applications that offer in-store promotions, encourage loyalty, provide additional information and product assortment. Using the findings of this study, practitioners should make sure they offer competitive pricing and the correct assortment in store to compete with online stores, this while developing their own online presence considering the needs of the emerging market consumer for product variety at competitive prices. Therefore, the main implication for retailers is the speed of adoption of showrooming behaviours by emerging market consumers which opens them up to additional competition and loosing revenue while cost increases.

10. Limitations and future research

The current study enhanced the understanding of showrooming behaviours among South African consumers form a consumer perceptive, however this is subject to several limitations that need to be recognised and which provide opportunities for future research. The study only focuses on some product characteristics as antecedents to showrooming and other characteristics, such as the touch-feel product characteristic was not included. The buying situation were not considered for example; routine purchases, first time purchase or repurchase of a specific item. Then, customer characteristics and channel characteristics used in the original study by Daunt and Harris (2017), were not reported on in this article. Furthermore, additional drivers of showrooming in emerging markets may be examined in a longitudinal study. Geographically, the study was conducted in Gauteng, South Africa, so findings cannot be generalised to the total population or other emerging markets. Further studies may be conducted nationwide and within additional markets. Future research may attempt to triangulate the emerging market consumer, store employee and broader organisational perspective to provide a more holistic assessment of underlying forces in showrooming.

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